Effective Metadata Systems for Archives

EAD and Unified Collection Management Systems

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Archival Metadata Systems

- Paper Finding Aids
- HTML Finding Aids
- EAD records
- Accession Databases
- Unified Collection Management Systems
  - Archivist’s Toolkit
  - Archon
  - ArchivesSpace
  - Proprietary or Museum-focused systems

Functions of Archival Metadata Systems

- Creation
- Management
  - Editing & Modifying
  - Enable Administrative functions
- Validation
  - Error-checking
- Public Access
- Aggregation
- Future Migration

Anne J. Gilliland-Swetland, “Popularizing the Finding Aid: Exploiting EAD to Enhance Online Discovery and Retrieval in Archival Information Systems by Diverse User Groups,” *Journal of Internet Cataloging* vol. 4, no. 3/4 (2001)

Local Habits Die Hard

- Flexibility of finding aids
- Archives unique, demand unique practices?
- Local practices doesn’t mean bad decision-making
  - Unique practices come from unique local context

- Problem was standardizing practices at the local level

Giving Data Structure

- Paper finding aids have no structure
  - Not machine readable
  - Not able to have automated functionality
- Structured data is unitized, has predefined rules
- Necessary to develop tools

- Use of XML to give structure to hierarchical archives metadata
  - EAD Standard

Problems with EAD, a Plural Standard

- Allowance of mixed content and Unstructured Data
  - <physdesc> 12 cubic ft.</phydesc>
  - <langmaterial>This collection is in <language>English</language>.</langmaterial>
- Failure to completely differentiate storage and display
  - Complains about public accessibility
- Difficulty of validation
  - Inconsistencies in valid EAD files
- Flexibility/Permissiveness
  - Many different ways to encode the same thing
  - Obstructs aggregation, migration
  - Makes overhauling the standard difficult
  - Hinders the development of modern online access tools

Problems with EAD, a Plural Standard

- Allowance of mixed content and Unstructured Data
  - Influenced by TEI
- Failure to completely differentiate storage and display
  - Web community still implementing concept
- Difficulty of validation
  - Problem with XML as a whole
- Flexibility/Permissiveness
  - Key to the wide use of EAD

Elizabeth H. Dow, “Encoded Archival Description as a Halfway Technology,” *Journal Of Archival Organization,* 7 (2009)

Still advantages to EAD

- Can be locally standardized with work
- As close to digitally universal as you can get
- Hierarchical structure matches archives metadata
- New tools and cheap processing power to take advantage of XML
- Raised the technological skills of archivists

Unified Collection Management Systems

- Manage Administrative and Descriptive Metadata
  - Specific to archives
- Graphical User Interfaces
- Actually a way to avoid EAD
  - Rely on relational databases
  - Allows for more standardization
  - Can usually export to EAD

Unified Collection Management Systems

- Archivist's Toolkit (no longer supported)
  - Focus on back-end accessioning and creation of description
- Archon (no longer supported)
  - Focus on front-end online access as well as the creation of description
- AtoM (Access to Memory)
  - Front end online access system
- ArchivesSpace
  - Goal to be complete end to end archival metadata system
  - SS code4lib article issue 9, 2010-03-22

Unified Collection Management Systems

- ArchivesSpace
  - Archivist's Toolkit backend
  - Archon public access
- Multiple systems redundant?
  - Combine resources
  - Share development effort
- Model is important, not software
  - One unified system

Unified Collection Management Systems

- Can often be stricter than EAD
- Can abrade with local practices
- May need to make minor adaptions to your local workflow
  - Many arbitrary practices
- Overall, wide use of these tools will standardize practices
  - Not always comfortable
- Often promotes better metadata creation

The Persistence of EAD

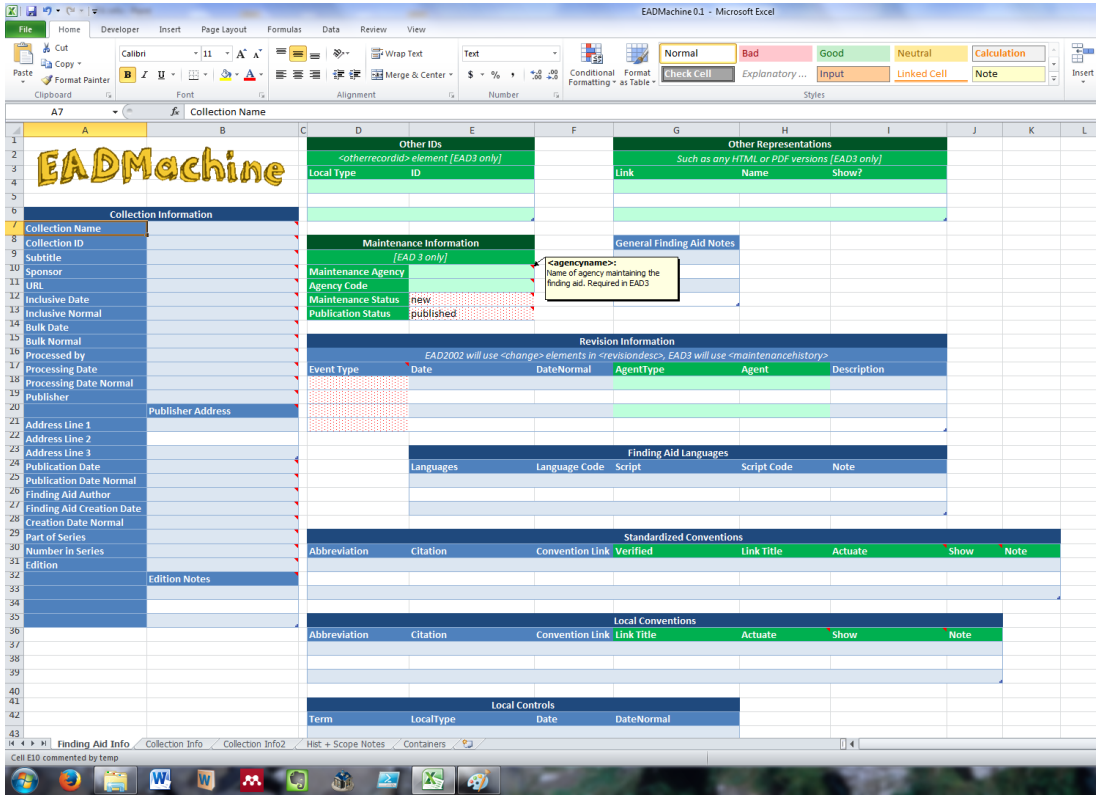
- Effective as Preservation Standard
- Yet EAD is still at the center of complex workflows
  - Automated, not manual
- EAD as a Metadata Dump
  - Unifying systems
  - Single Access point

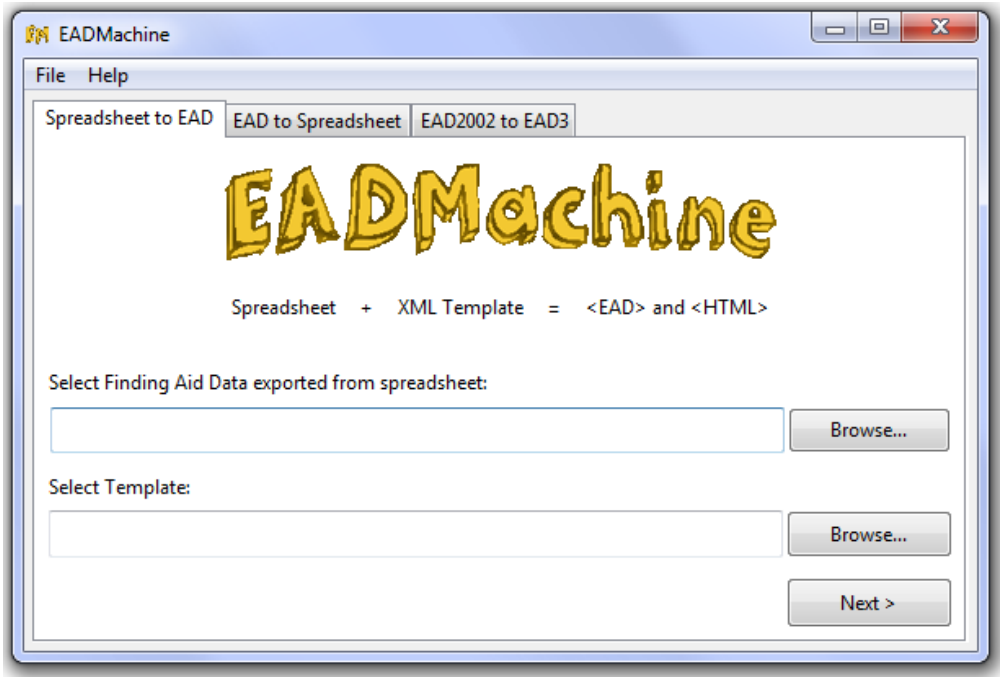
Developing Better Descriptive Metadata at UAlbany

- No Unified Collection Management Tool
- Finishing full implementation of EAD
- Inconsistent metadata

- Manage metadata before migration

Using EADMachine to Create Consistent EAD



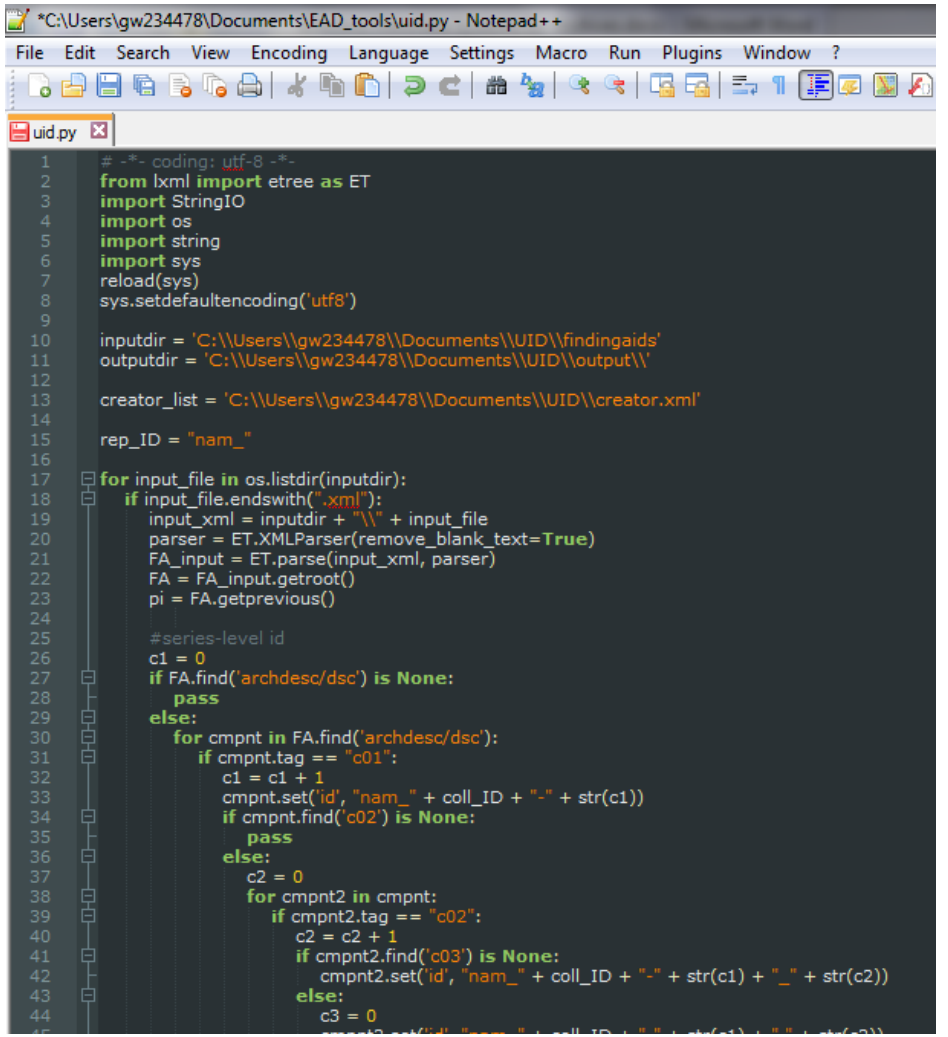


http://github.com/gwiedeman/EADMachine

Python Scripts to Manage EAD

- Unique ID System
- Remove special characters
- Standardize encoding
- Remove mixed content when possible
- Automate changes for digital objects
- Rule based-validation
- Separate public access system

http://github.com/gwiedeman/EAD_Tools



Modular Metadata System Design

- Multiple systems
- Move to ArchivesSpace for accession system
- Would need effort to migrate anyway

- Maintain separate public access system
- Possible continue to use EADMachine for now

Consistency, Consistency, Consistency

- Inconsistent application of tools undermines there use
  - Doesn’t matter how good the tool is
- Need to focus on use of tools, than functionality of tools

- Consistency of Metadata, not tools
  - Do we really need one, single unified tool?
  - Benefits of shared resources?

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